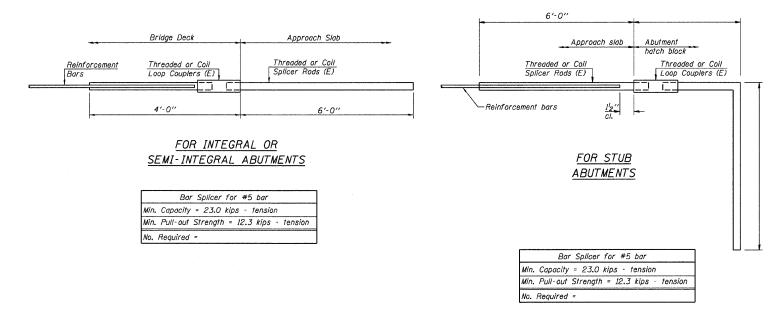


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nalling to wood forms or cementing to steel forms.
(E): Indicates epoxy coating.



Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

Minimum Capacity
(Tension in kips) = 1.25 x fy x A_t

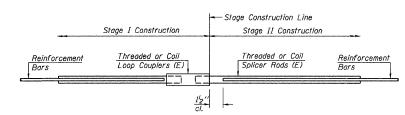
Minimum *Pull-out Strength
(Tension in kips) = 0.66 x fy x A_t

Where fy = Yield strength of lapped reinforcement bars in ksi.

A₁ = Tensile stress area of lapped reinforcement bars.

* = 28 day concrete

BAR SPLICER ASSEMBLIES								
Bar Size to be Spliced	Splicer Rad or Dowel Bar Length	Strength Requirements						
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension					
#4	1'-8''	14.7	7.9					
#5	2'-0"	23.0	12.3					
#6	2'-7"	33.1	17.4					
#7	3′-5″	45.1	23.8					
#8	4'-6"	58.9	31.3					
#9	5′-9′′	75.0	39.6					
#10	7′-3′′	95.0	50.3					
#11	9′-0′′	117.4	61.8					



STANDARD

Bar Size	No. Assemblies Required	Location
#6	28	058-0066

BAR SPLICER ASSEMBLY DETAILS

BSD-1

FILE NAME =	USER NAME = \$USER\$	DESIGNED	REVISED			F.A.I SECTION COUNTY TOTAL SHEET NO.
\$FILEL\$		DRAWN	REVISED	STATE OF ILLINOIS	BSD-1 058-0066	72 D7 BRIDGE REPAIRS 2008-2 MACON 31 17
	PLOT SCALE = #SCALE#	CHECKED	REVISED	DEPARTMENT OF TRANSPORTATION		CONTRACT NO. 74270
	PLOT DATE = \$DATE\$	DATE	REVISED		SCALE: 20 SHEET NO OF SHEETS STA TO STA	